

REMARKS

This paper is submitted in response to the Office Action mailed March 4, 2002.

Claims 14-22 are pending.

35 U.S.C. § 102(b) Rejection

I. JP 09302146

The Examiner has rejected Claims 14-16, and 18-20 under 35 U.S.C. §102(b) as being anticipated by JP 09302146 taken in view of the evidence of Miyazaki et al. (U.S. 6,109,320) and Agostini et al. (U.S. 6,160.047). The Examiner alleges that JP 09302146 discloses a tire which has a bead filler comprising 100 parts diene based rubber, predominantly natural rubber, 20-150 parts silica which has specific surface area of 210-300m²/g, 0-50 parts carbon black which has a specific surface area of 5-150 m²/g, and 5-25% based on the amount of silica, i.e. 1-37.5 parts, of silane coupling agent. The Examiner also infers that since carbon black is present in an amount of 0-50 parts, the rubber composition can comprise silica alone, or in combination with, carbon black. The Examiner also asserts that the bead filler comprises an additional diene elastomer, such as styrene-butadiene rubber, as evidenced by the abstract and paragraphs 9 and 10. The Examiner acknowledges that there is no explicit disclosure that the silica has SiOH surface functions and points to Agostini et al. (U.S. 6,160,047) as evidence that silica is conventionally known to have silanol, i.e. SiOH groups, on its surface. Furthermore, the Examiner alleges that Table 2 Example 4 discloses a composition that fulfills the limitation of the ratio of silane coupling agent to silica as presently claimed. Therefore, the Examiner alleges that JP 09302146 is cohesive and hysteric as claimed by the present

invention. The Examiner also points to Miyazaki (U.S. 6,109,320) as disclosing that the bead filler is a reinforcing layer found axially outside the turnup portion of the carcass and extending radially from the bead core, i.e. beadwire. Thus, the Examiner alleges that JP 09302146 anticipates the present invention.

Applicant respectfully traverses this rejection.

Applicant respectfully notes that the Examiner has cited the reference, JP09302146, as prior art, but has only provided an English abstract for the reference and has not provided an English translation of the reference. The Examiner has made mention of an oral translation performed by the USPTO Translation Branch. Applicant respectfully requests that the Examiner provide a certified translation of the reference. See *Ex parte Jones*, 62 U.S.P.Q.2d 1206, 1209 (Bb. Pat. App. & Int. 2001) ("In our view, obtaining translations is the responsibility of the examiner."), attached hereto as Exhibit 1. In addition, applicant requests that the Examiner defer the rejections relating to JP09302146 until a certified English translation of the reference has been provided to the applicant. Applicant presents below remarks based on the English abstract for the reference and the foreign language reference.

For a claim to be anticipated by a reference, "there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention." *Scripps Clinic & Research Foundation v. Gannett, Inc.*, 927 F.2d 1565 18 U.S.P.Q.2d 1001 (Fed. Cir. 1991). Moreover, a claim is anticipated and fails to meet the requirement of §102 only when a single prior art reference discloses each and every element of the claimed invention. *Lewmar Marine, Inc. v. Barient*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987), emphasis added.

JP 09302146 discloses a bead filler composition which is specifically meant to exhibit a high hardness for durability and fatigue resistance. This is in contrast to the present invention, which discloses an internal filler mix designed to provide high mechanical cohesion and low hysteresis by using comparatively low quantities of filler.

In the present invention, when silica is used as the sole filler, it must be present in an amount of between about 15 phr and 40 phr (see claim 14 (i)). In Example 3, Table 2 of JP09302146, silica is used as the sole filler and is present in an amount of 100 phr, which does not meet the required limitation of claim 14. Alternatively, the filler may comprise silica and carbon black used in combination. When silica is used in combination with carbon black in JP09302146 (see Examples 2 and 3 of Table 1; Examples 2, 4, 5 and 6 of Table 2), the total amount of filler ranges from 80 to 150 phr. In contrast, the combination of silica and carbon black in the filler, as recited in claim 14, must fall within 15 phr and 50 phr. Thus, JP09302146 does not teach the foregoing limitations of the present invention.

In addition, applicant submits that JP 09302146 alone fails to teach or suggest each and every limitation of independent claim 14. First of all, the Examiner has relied on support from three references to reject claims 14-16, and 18-20. In particular, the Examiner looks to (i) Agostini (U.S. 6,160,047) for support of silica having silanol and (ii) Miyazaki (U.S. 6,109,320) for support that the bead filler is a reinforcing layer found axially outside the turnup portion of the carcass and extending radially from the bead core.

For the foregoing reasons, applicant submits that JP 09302146 cannot anticipate the present invention and respectfully requests the withdrawal of the rejection.

II. EP 738614

The Examiner has also rejected Claims 14-16, 19, and 20 under 35 U.S.C. §102(b) as being anticipated by EP 738614 taken in view of the evidence in Zimmer et al. (U.S. 6,136,919). The Examiner alleges that EP 738614 discloses a rubber composition having a ratio of silane coupling agent to silica in the range as presently claimed. The Examiner also alleges that the rubber composition can be used in the tread base of the tire, which is located axially outside the upturn of the carcass reinforcement. Thus, the Examiner alleges that EP 738614 discloses a composition identical to the present invention that is cohesive and hysteretic as presently claimed.

Applicant respectfully traverses this rejection.

EP738614 discloses rubber compositions for use in the tread base for imparting a cooler running tire, improved rolling resistance and improved treadwear properties. EP738614 does not teach a rubber composition that is used in the bottom zone of the tire, as presently claimed. Applicants disagree with the Examiner's assessment of the location of the tread base. The tread base, in fact, extends radially in the radial direction of the tire, and not axially outside the upturn of the carcass reinforcement (see Figure 1). Thus, EP738614 does not disclose rubber compositions for use in internal tire parts.

Furthermore, sample Y disclosed in Table 1 does not meet the limitation of claim 14 that recites that the amount of white filler is "greater than or equal to the amount of carbon black minus 5 phr." Sample Y contains 28 phr of carbon black and 17 phr of silica. The amount of silica in the rubber composition is less than the amount of carbon

black. Thus, EP738614 cannot anticipate the presently claimed invention. For the foregoing reasons, applicant respectfully requests withdrawal of the rejection.

35 U.S.C. § 103(a) Rejections

The Examiner has rejected claim 17 under 35 U.S.C. §103(a) as being unpatentable over JP09302146 or EP 738614 in view of Takeichi et al. (US Patent 6,008,295). The Examiner has alleged that the difference between JP09302146 or EP 738614 and the present invention is the specific type of additional diene elastomer. The Examiner also alleges that Takeichi et al. teaches the use of silicon or tin halide modified diene elastomer in order to produce a composition with superior fracture properties and low hysteresis loss. In light of the motivation for using the specific type of diene elastomer, the Examiner alleges that it would have been obvious to one of ordinary skill in the art to use this diene elastomer in the elastomeric filler mix of JP09302146 or EP 738614 to produce the mix of the claimed invention.

The Examiner has rejected claims 21 and 22 under 35 U.S.C. §103(a) as being unpatentable over JP09302146 or EP 738614 in view of Fukahori et al. (US Patent No. 5,844,050). The Examiner alleges that Fukahori discloses a diene elastomer comprising a majority of cis-1,4-bonds, which is branched using divinylbenzene in order to produce a composition with good abrasion resistance, fatigue resistance and tensile properties. The Examiner alleges that it would be obvious to use the divinylbenzene branching agent in elastomeric filler mix of JP09302146 or EP 738614 in order to produce a branched elastomer and thus a mix with good abrasion resistance, fatigue resistance and tensile properties to arrive at the claimed invention.

The Examiner has rejected claim 18 under 35 U.S.C. §103(a) as unpatentable over EP 738614 in view of Suzuki et al. (US Patent No. 5,902,856). The Examiner alleges that the difference between the present invention and EP 738614 is the BET specific surface area of carbon black. The Examiner alleges that Suzuki discloses the use of carbon black that has specific surface area of 80-130m²/g in order to produce a composition which has highly improved tensile strength and abrasion resistance. The Examiner alleges that it would be obvious to one of ordinary skill in the art to use the carbon black in Suzuki in the elastomeric filler mix of EP 738614 in order to produce a mix which has highly improved tensile strength and abrasion resistance.

Applicant respectfully disagrees.

As set forth in *Graham v. Deere*, a finding of obviousness under 35 U.S.C. §103 requires a determination of the scope and content of the prior art, the level of skill in the art, the differences between the claimed subject matter and the prior art, and whether the differences are such that the subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made. *Graham v. John Deere, Inc.*, 383 U.S. 1 (1966). The art must provide both the suggestion and a reasonable expectation of success. *In re Vicki*, 947 F. 2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The prior art reference(s) must teach or suggest all the claim limitations. Both the suggestion and a reasonable expectation of success must be present in the references themselves. See M.P.E.P. § 2143 et seq. The cited prior art considered independently or together fail to satisfy the recited criteria.

As discussed above, applicants request that the Examiner defer any rejection that relates to JP09302146 until a certified English language translation is made available to

the applicant. Applicant presents below remarks based on the English abstract for the reference and the foreign language reference.

JP09302146 does not discloses an internal filler mix designed to provide high mechanical cohesion and low hysteresis by using comparatively low quantities of filler. When silica is used as the sole filler (see Example 3, Table 2), it is present in an amount of 100 phr, which does not meet the required limitation of claim 14 that requires an amount of between about 15 phr and 40 phr. When silica is used in combination with carbon black (see Examples 2 and 3 of Table 1; Examples 2, 4, 5 and 6 of Table 2), the total amount of filler ranges from 80 to 150 phr, which does not fall between 15 phr and 50 phr, the required limitation of claim 14. Thus, JP09302146 does not teach the foregoing limitations of claim 14.

EP738614 describes a tire with a cap/base construction composed of rubber compositions imparting a cooler running tire and improved rolling resistance and treadwear properties to the tire. These are improved qualities of a rubber composition which is utilized for external portions of a tire, not internal tire parts such as the bottom zone of the tire. As discussed on page 5 of this response, the tread base in EP 738614 extends radially, not axially outside the upturn of the carcass reinforcement.

Takeichi et al. relates to a rubber composition for a tire tread to produce a tire with improved rolling resistance, wet traction and handling and traction in snow and ice. These rubber compositions are also directed to use in external tire parts. Thus, there is no suggestion or motivation to combine JP 09302146 or EP 738614 with Takeichi et al. to obtain the presently claimed invention.

Fukahori concerns a modified conjugated diene polymer and its use as a rubber composition in tires to impart improved abrasion resistance, fatigue resistance, tensile and rebound resilience properties. These properties are advantageous for use in external portions of a tire. Thus, there is no suggestion or motivation to combine JP 09302146 or EP 738614 with Fukahori to obtain the presently claimed invention.

Suzuki et al. describes a diene rubber composition mixture which produces a tire with improved abrasion resistance, resiliency and processability. These compositions are directed to uses in external tire parts. Thus, there is no suggestion or motivation to combine JP 09302146 or EP 738614 with Suzuki et al. to obtain the presently claimed invention.

In view of the foregoing, withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested.

CONCLUSION

Applicant requests a two month extension of time and enclose herewith the required fee pursuant to 37 C.F.R. § 1.17(a)(2). Should any additional fees be required in connection with this response, the Commissioner is hereby authorized to charge Deposit Account Number 02-4377. A duplicate of this page is enclosed.

Respectfully submitted,

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Ex parte Jones

U.S. Patent and Trademark Office Board of Patent Appeals and Interferences

Appeal No. 2001-1839

Decided November 28, 2001

PATENTS

[1] Patentability/Validity -- Obviousness -- Combining references (§ 115.0905)

"Motivation" to combine teachings of prior art is not always required to support obviousness rejection under 35 U.S.C. § 103, since legally sufficient rationale for finding of obviousness may be supported by reason or suggestion in prior art, as well as motivation, to combine teachings.

[2] Practice and procedure in Patent and Trademark Office -- Board of Patent Appeals and Interferences -- Rules and rules practice (§ 110.1105)

Patentability/Validity -- Obviousness -- Relevant prior art -- In general (§ 115.0903.01)

Patent examiner's citation of abstract in support of rejection without citation and reliance on underlying scientific article is generally inappropriate if both abstract and underlying document are prior art, and proper examination therefore should be based on underlying documents and translations, if necessary, since abstracts often are not written by author of underlying document, and may be erroneous; in present case, in which neither examiner nor applicant relies on underlying articles, Board of Patent Appeals and Interferences, in exercise of its discretion, will not obtain translations of underlying journal articles in order to evaluate merits of translations in first instance, since it is examiner's responsibility to obtain translations, and since review of translations by examiner and applicant may supply additional evidence as to whether there is legally sufficient reason, suggestion, teaching, or motivation to combine teachings of cited articles, and thus may eliminate need for appeal.

Patent application of Jones, serial no. 08/947,428. [FN 1] Applicant appeals from examiner's rejection of claims 38 and 39 in application. Vacated and remanded.

[Editor's Note: The Board of Patent Appeals and Interferences has indicated that this opinion is not binding precedent of the board.]

Before Winters and William F. Smith, administrative patent judges, and McKelvey, senior administrative patent judge.

McKelvey, S.J.

Decision on appeal under

The appeal is from a decision of a primary examiner rejecting claims 38-39. We vacate and remand for action not inconsistent with views expressed herein.

A. Findings of fact

The record supports the following findings by at least a preponderance of the evidence. [FN2]

1. The claimed invention relates to a method of making organic chemicals.

2. The examiner has rejected claims 38-39 as being unpatentable under 35 U.S.C. § 103(a) over

- *1207 a) Horner,
- b) Suri,
- c) Endelman,
- d) Manthey and
- e) Ota.

3. Horner is a 25-page technical journal article written in German.

4. The examiner has placed in the record a short English-language abstract of Horner.

5. The record does not contain an English-language translation of Horner.

6. Suri is a 2-page technical journal article written in

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English.

7. Endel'man is a 4-page technical journal article written in Russian.

8. The examiner has placed in the record a short English-language abstract of Endel'man.

9. The record does not contain an English-language translation of Endel'man.

10. Manthey is a 5-page technical journal article written in English.

11. Ota appears to be a 5-page technical journal article written in Japanese.

12. The examiner has placed in the record a short English-language abstract of Ota.

13. The record does not contain an English-language translation of Ota.

14. The examiner does not maintain that any one of the five prior art references fully describes the claimed invention. Hence, a rejection based on 35 U.S.C. § 103(a).

15. According to the examiner, "the skilled artisan looking for an alternative route for the preparation" of the product produced by the claimed method "was deemed to be aware of all the various methods of the preparation" of the product (Examiner's Answer, page 4).

16. Further according to the examiner, "one of ordinary skill in the art would be motivated [sic--would have been motivated] to prepare *** [the compound made by applicant's claimed method] by coupling Suri's *** acid and Endel'man's *** acid as taught by Manthey followed by *** [further treatment] to yield *** [a compound] as taught by Horner and subsequent reduction as taught by Ota to arrive at the *** [claimed process]" (Examiner's Answer, pages 4-5).

17. According to applicant, the requisite "motivation" is not present in the prior art because "[t]hroughout the prosecution the examiner has failed to point out any teaching or suggestion in the prior art that would motivate the skilled artisan" to use the claimed process invention (Appeal Brief, page 4).

B. Discussion

1. Rationale in support of obviousness

[1] The applicant and the examiner have apparently assumed that there always must be "motivation" to combine teachings of the prior art to support a rejection based on § 103(a). The assumption is not correct. The word "motivation" or a word similar to "motivation" does not appear in 35 U.S.C. § 103(a). While a finding of "motivation" supported by substantial evidence probably will support combining teachings of different prior art references to establish a *prima facie* obviousness case, it is not always necessary. For example, where a claimed apparatus requiring Phillips head screws differs from a prior art apparatus describing the use of flathead screws, it might be hard to find motivation to substitute flathead screws with Phillips head screws to arrive at the claimed invention. However, the prior art would make it more than clear that Phillips head screws and flathead screws are viable alternatives serving the same purpose. Hence, the prior art would "suggest" substitution of flathead screws for Phillips head screws albeit the prior art might not "motivate" use of Phillips head screws in place of flathead screws.

What must be established to sustain an obviousness rejection is a legally sufficient rationale as to why the claimed subject matter, as a whole, would have been obvious notwithstanding a difference between claimed subject matter and a reference which is prior art under 35 U.S.C. § 102. Once a difference is found to exist, then the examiner must articulate a legally sufficient rationale in support of a § 103(a) rejection. The legally sufficient rationale may be supported by a reason, suggestion, teaching or motivation in the prior art which would have rendered obvious the claimed subject within the meaning of § 103(a). In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998) (there must be some teaching, suggestion or motivation in the prior art to make the specific combination that was made by the applicant); In re Gartside, 203 F.3d 1305, 1319, 53 USPQ2d 1769, 1778 (Fed. Cir. 2000) (the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a teaching or motivation to combine prior art references); Pro-Mold and *1208Tool Co. v. Great Lakes Plastics Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629 (Fed. Cir. 1996) ("there must be a reason, suggestion, or

motivation *** to combine [the teachings of] *** references ***"); Smiths Industries Medical Systems, Inc. v. Vital Signs, Inc., 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1420-21 (Fed. Cir. 1999) (there is no basis for concluding that an invention would have been obvious solely because it is a combination of elements that were known in the art at the time of the invention; the relevant inquiry is whether there is a reason, suggestion, or motivation in the prior art that would lead one of ordinary skill in the art to combine the teachings of the references).

Moreover, when an examiner maintains that there is an explicit or implicit teaching or suggestion in the prior art, the examiner should indicate where (page and line or figure) such a teaching or suggestion appears in the prior art. In re Rijckaert, 9 F.3d 1531, 1533, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993), citing In re Yates, 663 F.2d 1054, 1057, 211 USPQ 1149, 1151 (CCPA 1981).

One difficulty with the rationale in support of the examiner's rejection in this case, and for that matter the applicant's challenge to the rejection, is that it appears to be based solely on a motivation rationale without taking into account whether there otherwise is a legally sufficient reason, showing, suggestion or teaching which might also suffice to support the examiner's rejection. Moreover, a suggestion, teaching or motivation to combine teachings of the prior art may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved. In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). See also In re Gartside, *supra* at 1319, 53 USPQ2d at 1778 (the suggestions may come from, *inter alia*, the teachings of the references themselves and, in some cases, from the nature of the problem to be solved).

If the examiner determines that it is appropriate to enter a further rejection, the examiner may wish to consider a rationale based on a suggestion, teaching or other reason in place of a rationale based exclusively on motivation.

We will also note that the examiner's theory of rejection, at least in part, seems to rely on the proposition that if a person of ordinary skill in the art is looking for an alternative method for the preparation of a compound, then that person would be aware of all analogous art (see Finding 15). If the examiner continues to rely on that theory, then the

examiner would be under a burden to establish why a person of ordinary skill in the art would be looking for an alternative method, particularly where a method is known for making a particular compound.

2. Use of abstracts in place of

The principal difficulty with the prosecution of the application on appeal is the examiner's attempt to establish "motivation" by reliance on three English-language abstracts of journal articles written in foreign languages. The examiner does not maintain that only Suri and Manthey, both in English, support the rejection. The use of abstracts, when the underlying document is prior art, gives us considerable pause.

The Board of Patent Appeals and Interferences continues to have recurring problems in resolving ex parte appeals which come before it. One continuing recurring problem is the citation and reliance by examiners on abstracts, without citation and reliance on the underlying scientific document.

[2] In this appeal, the examiner relied upon abstracts of three technical journal articles without referring to translations of the underlying documents. Citation of an abstract without citation and reliance on the underlying scientific document itself is generally inappropriate where both the abstract and the underlying document are prior art. Abstracts often are not written by the author of the underlying document and may be erroneous. It is our opinion that a proper examination under 37 CFR § 1.104 should be based on the underlying documents and translations, where needed. Accordingly, the preferred practice is for the examiner to cite and rely on the underlying document.

When an examiner cites and relies only on an abstract, the applicant may wish to obtain a copy of the underlying document and submit a copy to the examiner when responding to a rejection relying on an abstract. In the event a reference is in a foreign language, if the applicant does not wish to expend resources to obtain a translation, the applicant may wish to request the examiner to supply a translation. If a *1209 translation is not supplied by the examiner, the applicant may wish to consider seeking supervisory relief by way of a petition (37 CFR § 1.181) to have the examiner directed to obtain and

supply a translation.

In the past, when neither the examiner nor the applicant relies on the underlying article, the board often expended the resources necessary to obtain a copy of the underlying scientific article, as well as translations thereof. When it did so, however, the burden of examining the application fell on the board in the first instance. Moreover, to the extent that the board relies on parts of a translation not previously provided to an applicant, any affirmance generally has to be a new ground of rejection under 37 CFR § 1.196(b)--which can result in further prosecution.

In this case, we do not know whether the examiner or the applicant had or reviewed the underlying foreign language technical journal articles or translations thereof. The board cannot examine, in the first instance, all applications which come before it in an ex parte appeal under 35 U.S.C. § 134. In this particular appeal, we exercise discretion by declining to obtain translations of the underlying technical journal articles and thereafter evaluate on the merits in the first instance the translations. In our view, obtaining translations is the responsibility of the examiner. A review by the examiner and applicant of translations of the prior art relied upon in support of the examiner's rejection may supply additional relevant evidence as to whether there is a legally sufficient reason, suggestion, teaching or motivation to combine the teachings of the five technical journal articles. Moreover, an evaluation of translations may eliminate the need for an appeal.

C. Decision

The decision of the examiner rejecting claims 38-39 under 35 U.S.C. § 103(a) over (1) Horner, (2) Suri, (3) Endelman, (4) Manthey and (5) Ota is vacated and the application is remanded to the examiner. For the effect of a decision vacating an examiner's rejection, see In re Zambrano, 58 USPQ2d 1312 (Bd. Pat. App. & Int. 2001) (explaining that vacated rejection no longer exists).

The examiner and/or the applicant may obtain translations of (A) Horner, (B) Endelman and (C) Ota.

Nothing in this opinion should be read as precluding the examiner from entering a rejection based on translations. In the event the examiner determines that

claims 38-39 are unpatentable over the combination of the five references (or any additional prior art), then the examiner must identify and cite the specific portions (page and line or figure) of each article or prior art document upon which he relies in support of any rejection. We are primarily a board of review. Accordingly, neither the examiner nor applicant should expect in any further appeal for us to dig through five prior art references to come up with a theory which might support or negate a rejection in the first instance. Moreover, if the examiner enters a further rejection based on foreign language document, translations must be obtained if a further appeal is taken. We will not decide a further appeal without translations.

We express no views on the ultimate merits of any rejection under 35 U.S.C. § 103(a) based on the five prior art references or any additional prior art which the examiner and applicant may wish to make of record.

D. Order

Upon consideration of the appeal, and for the reasons given, it is

ORDERED that the examiner's rejection under § 103(a) of claims 38-39 is vacated.

FURTHER ORDERED that the application is remanded to the examiner for action not inconsistent with the views expressed in this opinion.

FURTHER ORDERED that no time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

VACATED and REMANDED

FN1. Application for patent filed 8 October 1997.

FN2. To the extent these findings of fact discuss legal issues, they may be treated as conclusions of law.

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BAKER BOTTS LLP

Attorney Docket Number: A32979 070337.0181

Title: IMPROVEMENT IN THE LIFE OF RADIAL-CARCASS TIRES BY USING SPECIFIC COHESIVE,
LOW-HYSTERESIS COMPOSITIONS

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